C3 Spectrum Mass Scanner Overview

Why C3

- Video solutions deployed across a wide range of industry verticals
- Supply chain trust within R&D, manufacturing and QA/QC
- Engineered in the USA and Canada

C3 Thermal Safetech Solutions empowers our customers as the industry-leading single source of a complete re-open platform solution focusing on helping businesses reopen, protect employees, and clients..

Manufacturing and Compliance

Trade Agreements Act FAR 52.225-5

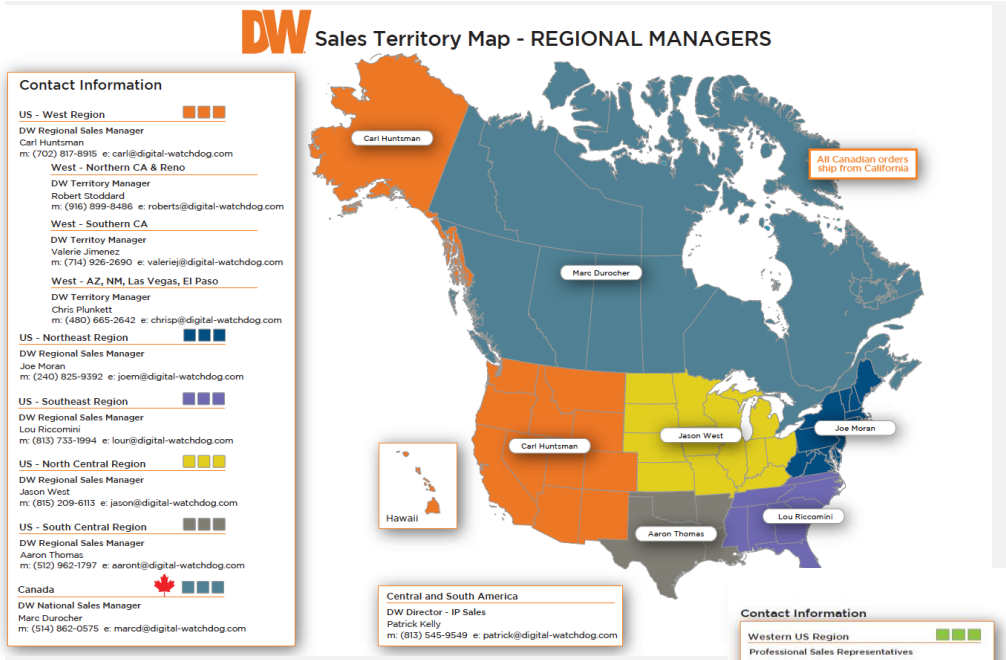
TAA / NDAA Compliant

- All c3® IP cameras, analog cameras, NVRs, DVRs, network devices and management software sold and distributed worldwide are designed and developed in U.S.A.
- Most C3® products qualify for GSA Schedule Contracts and other government opportunities because they are TAA & NDAA compliant.

C3 Pre & Post Sales Support

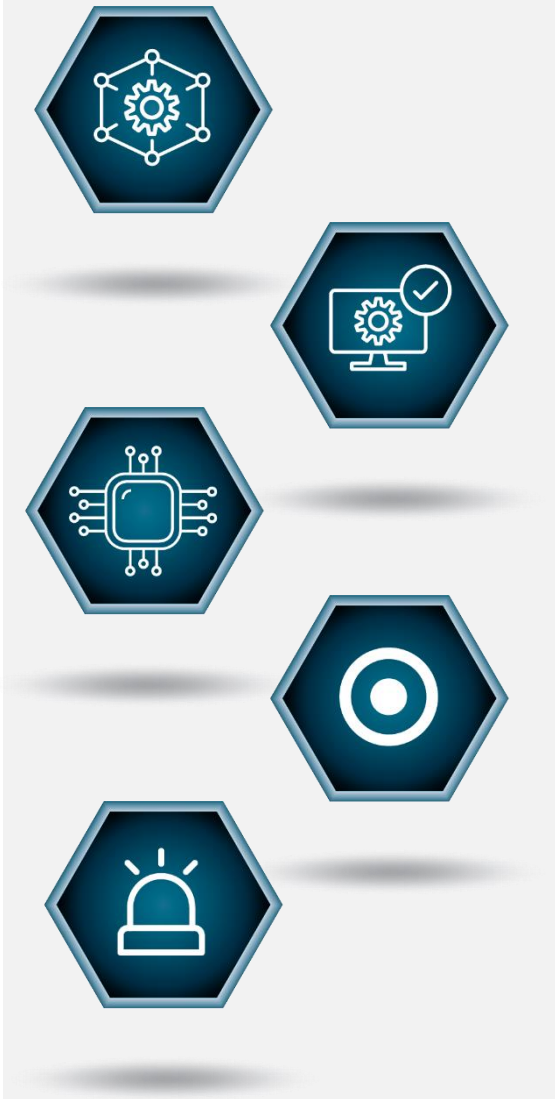
Our team is ready to partner with you to provide solutions that fit your application.

- Regional Sales Managers
- Sales Engineers
- Manufacturer Representatives



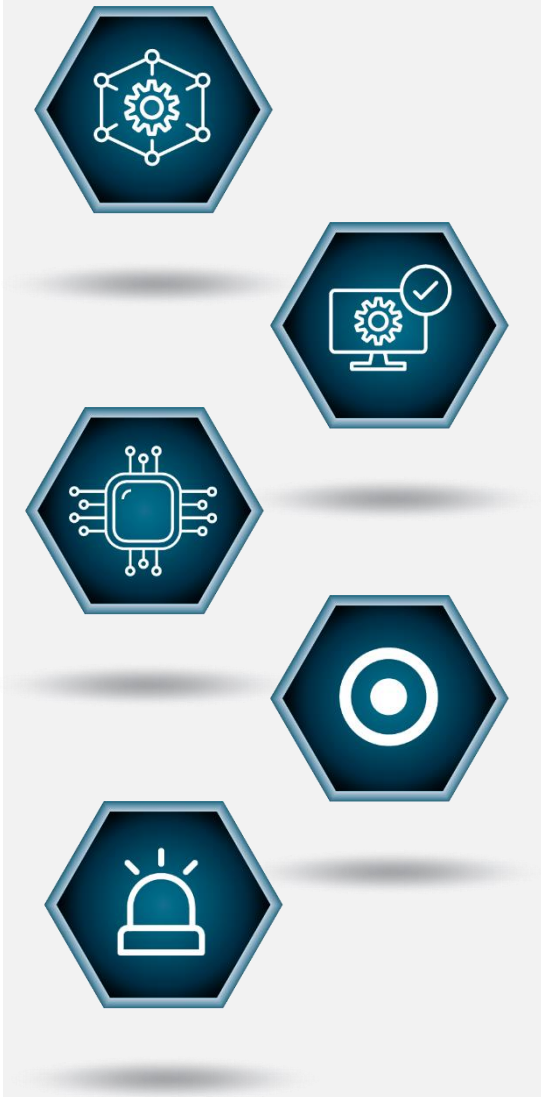
C3 Elevated Skin Temperature System Product Overview

What is the C3 E.S.T Solution



- Security-grade thermal camera that provides a low-friction, contactless alternative to traditional screening methods.
- Identifies people with elevated skin temperature so you can easily separate them for additional screening.
- A complete kit:
  - Dual Sensor Thermal / High Definition Camera
  - Blackbody Temperature Sensor
  - C3 software
  - Two device Tripods

C3 E.S.T Solution Features



- Self-calibrates in real-time with Blackbody to provide high accuracy skin temperature readings.
- 4x larger sensor, providing 4x more data processing power for higher accuracy.
- High-throughput prescreening of people to detect indications of elevated skin temperature at various distances.

- **NOTE:** This product is not designed by DW for the specific intention of human fever detection nor the diagnosis, mitigation, or prevention of disease or health conditions.

C3 E.S.T Solution Specifications

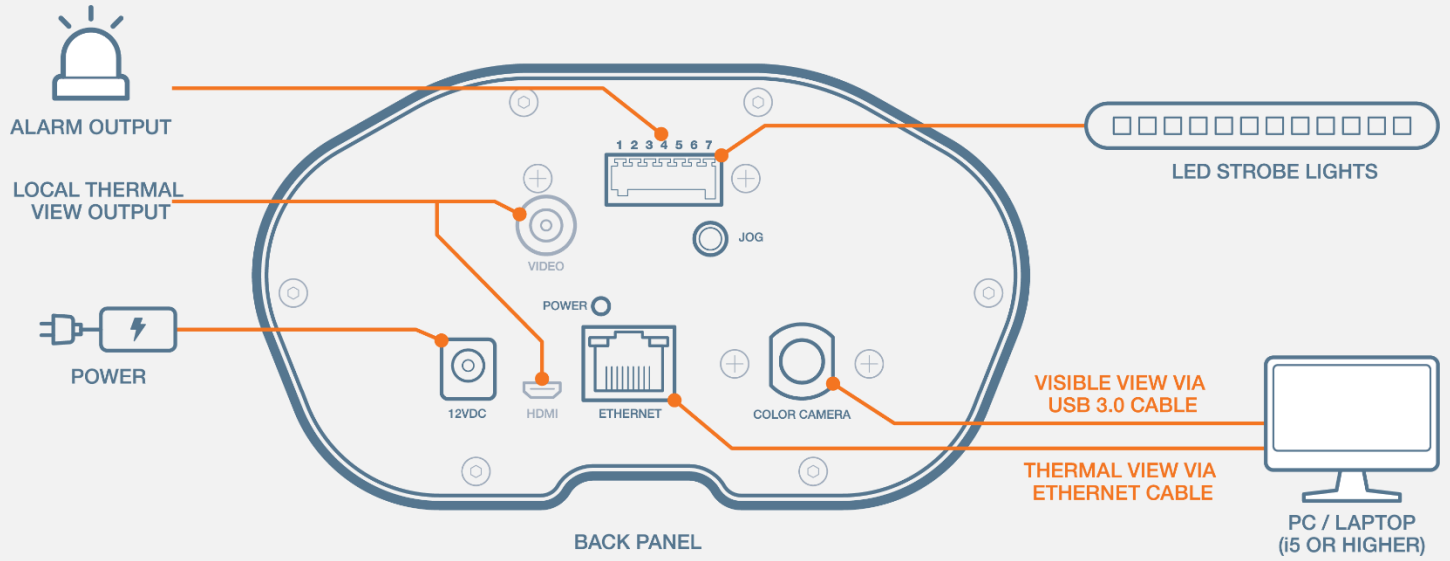
Description		Thermal	Visible
Image sensor		Uncooled focal plane array	1/3" progressive CMOS (2.1MP/1080p)
Resolution		384 x 288	1920x1080p
Maximum framerate		30Hz	30fps
Focal length		Thermalized lens, 8.13mm f1.16	4.0mm
FOV		47.4° HFOV	70° HFOV
Temperature sensitivity		50mK@f1.0, 30Hz, 300K	
Interface		Gigabit Ethernet (10/100)	USB3.0 super-speed
Detection Range		6.5~16.4ft (2m~5m) 10ft is recommended	
Accuracy		+/-0.36°F (+/-0.2°C)	
Software analytics		Temperature detection, Blackbody detection error	
Operating temperature		14°F~104°F (-10°C~40°C), under 80% humidity	
Input voltage		12V DC (Camera and Blackbody)	
Blackbody	Recommended distance from the camera	9.8~14.7ft (3m~4m) 10ft is recommended	
	Default temperature	104°F (40°C)	
Dimensions	Camera	3.18" x 5.31" x 5.92" (81 x 135 x 150.5mm)	
	Blackbody	2.83" x 2.83" x 1.92" (72 x 72 x 49mm)	
Warranty		2 -year limited warranty	

C3 Mass Scan Complete Solution

- Complete standalone integrated solution
- Ideal for pre-screening at secured entrances to schools, offices and warehouses.

C3 Spectrum Solution Easy Set Up

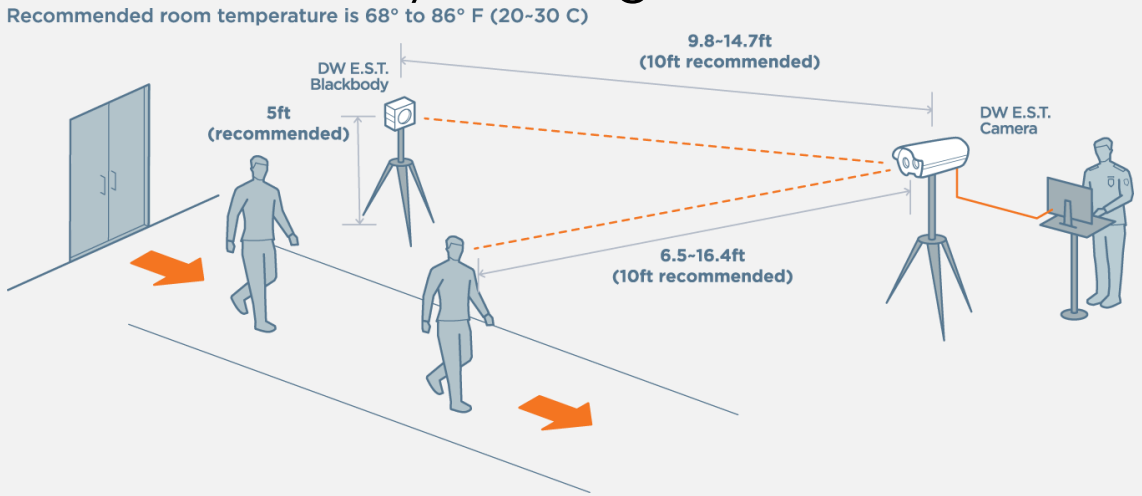
- Sets up in minutes
- Thermal image via ethernet and visible image via USB cable
- Visible or conceal from view
- Easily integrate into an existing access control solution using alarm outputs



C3 Solution Flexible Distances

Ideal standalone solution when the following is maintained:

- Set to a single person scanning mode
- Recommended room temperature is 68° to 86°F (20° to 30°C)
- 6.5~16.4ft (2m~5m) effective distance from people (10ft is recommended)
- 9.8~14.7ft (3m~4m) effective distance from the Blackbody (10ft is recommended)
- Recommended height of the Blackbody is 5ft (1.5m)
- ±0.36°F/ 0.2°C accuracy reading



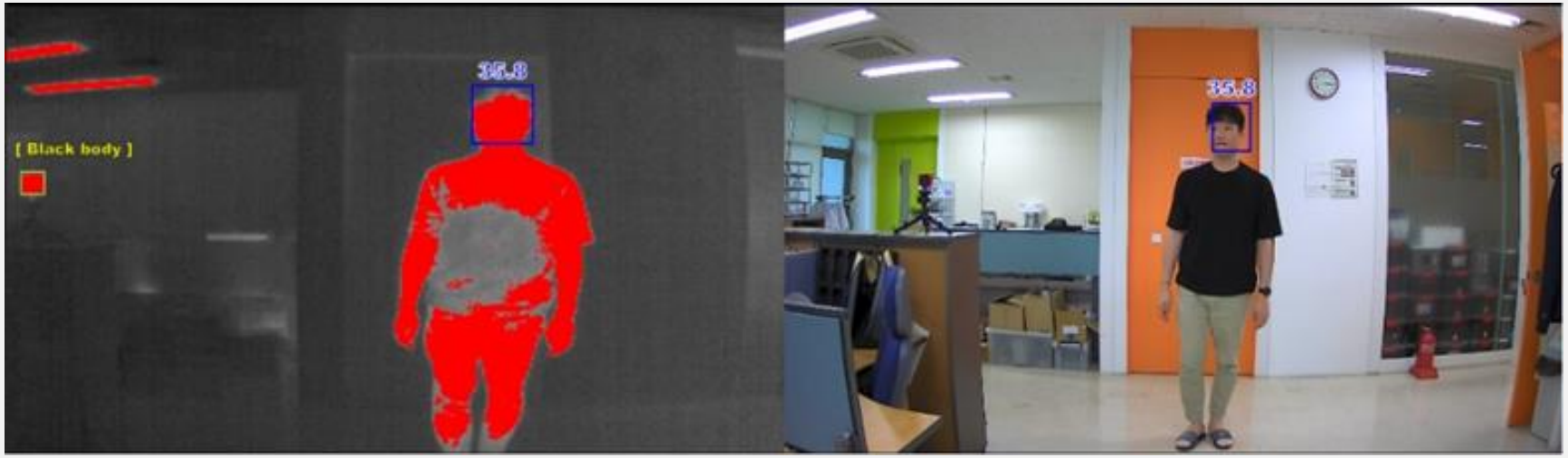
C3 E.S.T Solution Smart Auto-Calibration

- Connect the camera directly to a PC
- The software automatically finds where the Blackbody is in the camera's Field of View (FoV)
- The Blackbody provides a constant reference temperature
- Self-calibrating in real-time

C3 E.S.T Solution High Quality Images

To identify individuals;

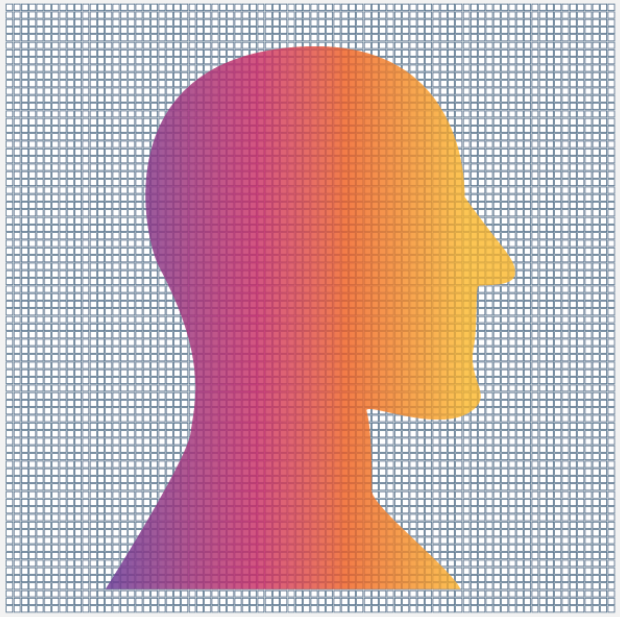
- 2.1MP/1080p resolution live feed
- Image enhancement features
- True WDR



C3 E.S.T Solution Larger Thermal Sensor

- 384 x 288 sensor
- 4x larger sensor, providing 4x more data processing power for higher accuracy.

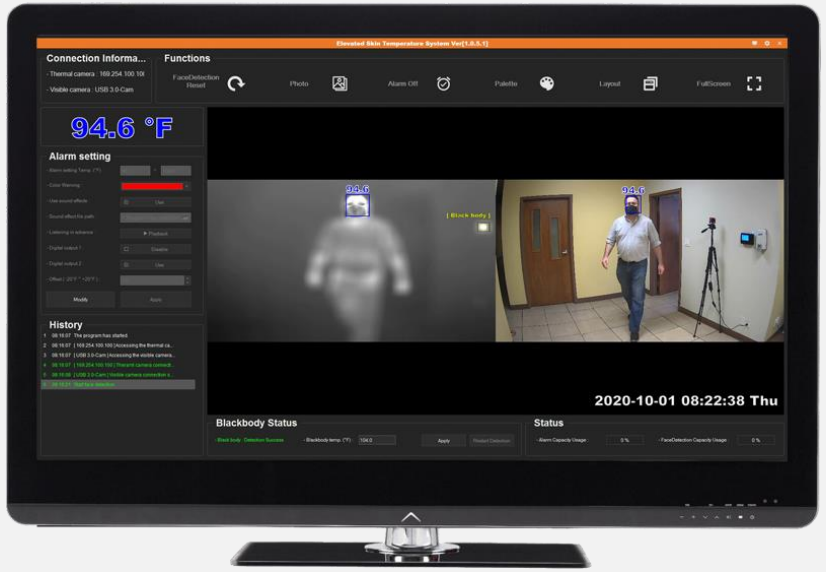
160x120 IP thermal sensor



C3's 384x288 thermal sensor

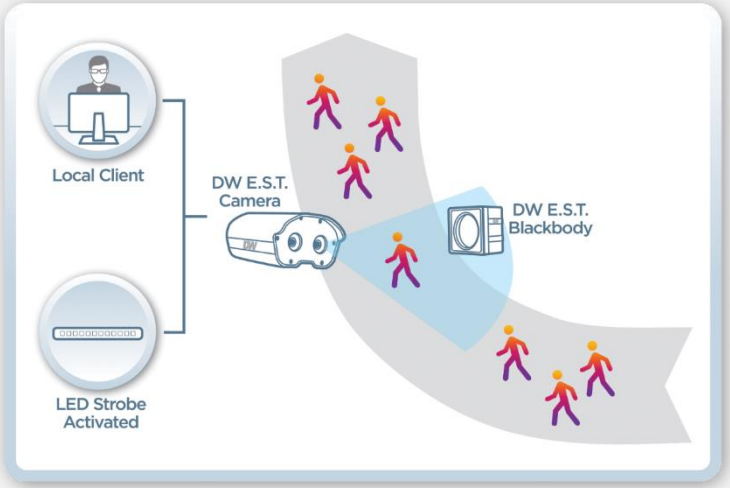
C3 E.S.T Solution Software side processing

- The camera transmits 110,592 pixels of raw thermal data
- The software performs the calculations of the data on the PC
- The software provides highly accurate readings, quickly.



C3 E.S.T Solution Notification

- Instant notification when additional screening in needed
- Automatic visual notification
- Automatic audible alarms
- Confirm results with a secondary screening medical tool, such as a thermometer, and medical questionnaire.



Questions to Consider

C3 Solutions - Which screening is best for me?

The skin temperature screening market includes multiple solutions and options. Consider crowd scanning, Blackbody references, relative vs. absolute readings and outdoor versus indoor. Finding the right technology provider, integrators and installers who understand the standards and regulations is paramount to ensure your solution meets your needs.

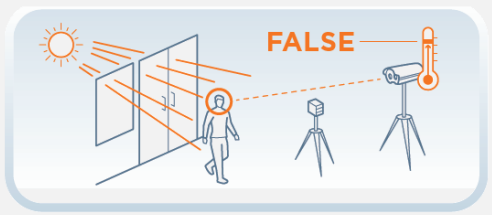
Sensitivity

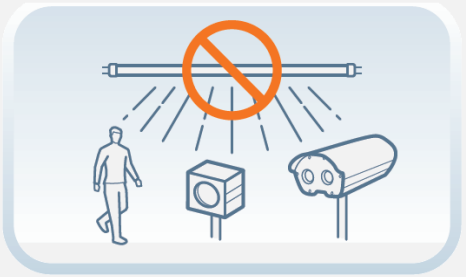
- Skin temperature screening solutions' sensitivity is measured by Noise Equivalent Temperature Difference (NETD) in millikelvins (mK). NETD specifies the smallest temperature difference the camera can distinguish clearly of the camera's noise. The lower the mK is, the camera will produce a more detailed and more accurate image. DW's E.S.T. camera has a sensitivity rate of 50mK at F1.0.

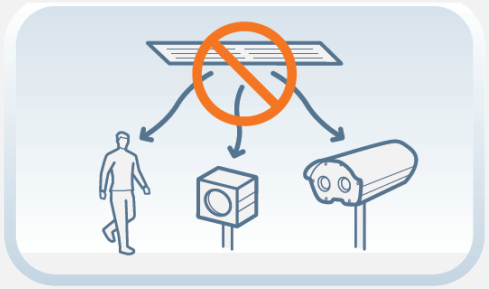
Accuracy

- The accuracy of a skin temperature screening solution tells you the absolute measurement error of a target's skin temperature. Elevated skin temperature screening should have high accuracy levels of ±0.3°C (0.5°F) or lower. To help achieve high accuracy measurements, the camera's temperature reference should be adjusted frequently and according to the flow of people and environmental impact.

C3 Solution Where to Screen ?



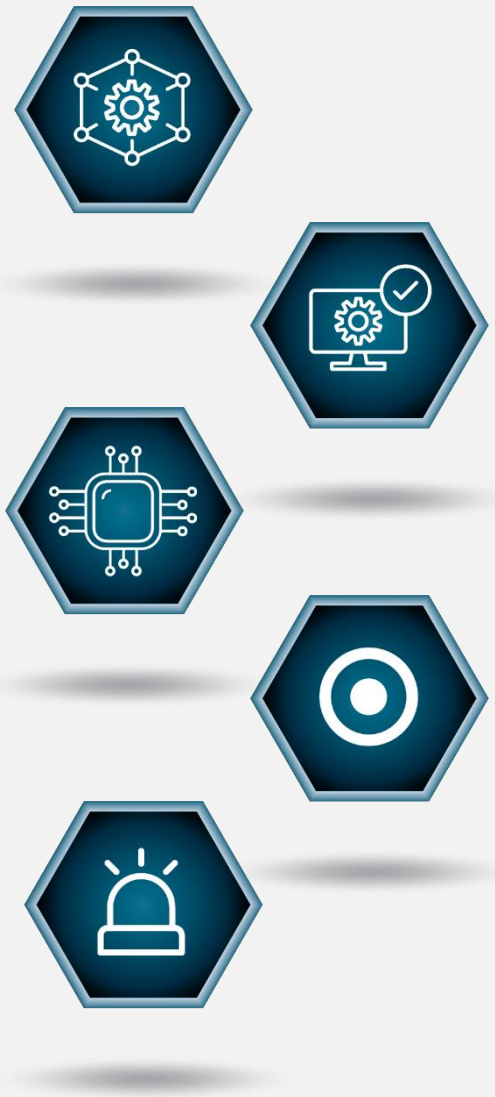




Environmental factors such as airflow and sunlight can influence the accuracy of your measurement.

- Set your screening station indoors. Solar loading or reflection could cause false alarms. Hot objects could inflate measurements if the thermal camera detects them.
- Strong fluorescent lighting above or around the camera, the Blackbody or the camera's FOV could impact the temperature readings.
- Heating and cooling ducts provide airflow that may create convective heat transfer conditions. This could artificially raise or lower the skin surface temperature of the screening subject.

C3 Solution Location, Location, Location

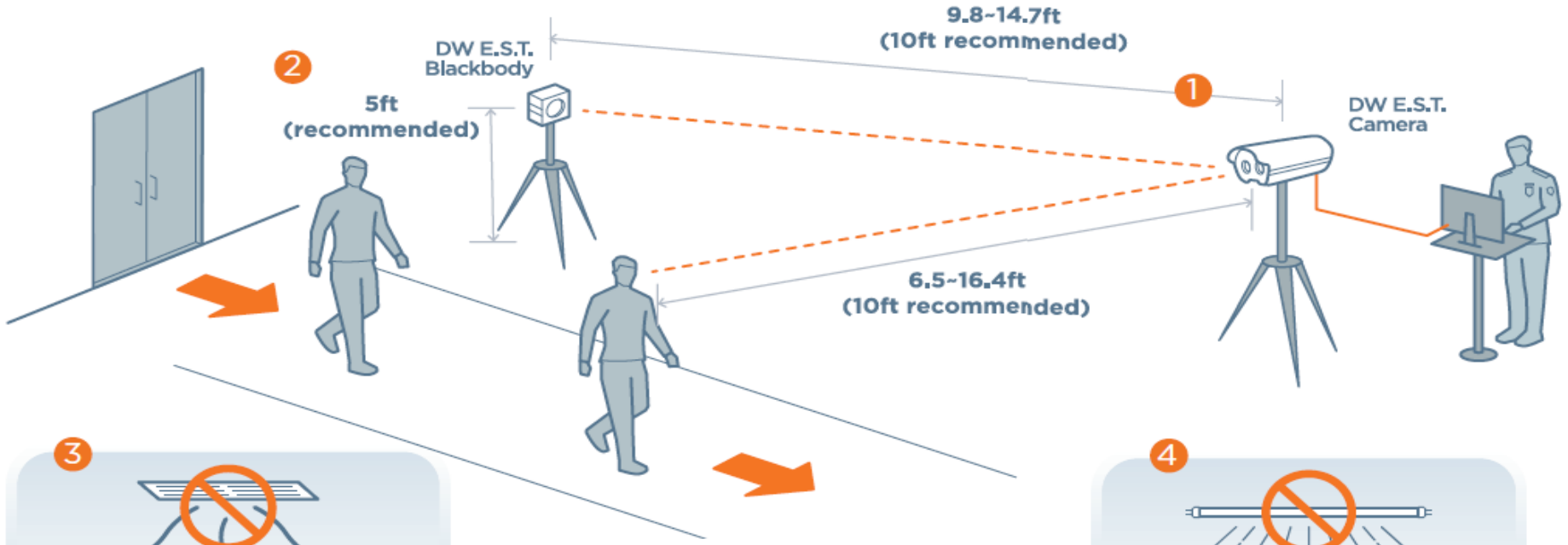


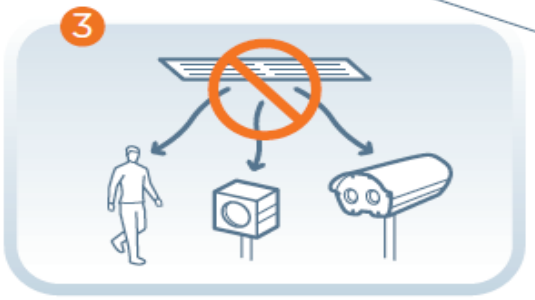
Selecting the right location for your screening station has a direct impact on your screening process. Consider the following:

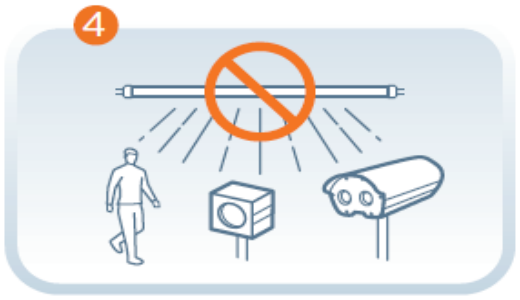
- Indoor screening in a controlled environment is optimal. Consider a location where temperature maintains at 68°F to 86°F (20°C to 30°C) and the relative humidity is under 80 percent.
- Avoid mounting your camera or Blackbody under an air duct and keep out of direct sunlight.
- Keep other heat sources out of the camera's view.
- Reflective backgrounds such as metallic surfaces or windows can increase false readings and temperature errors.
- Install the camera facing away from the door, and at a 20° angle from the screening path.
- Consider the direction of the object's movement. People should be walking in and out of the camera's FOV, not directly towards the camera.

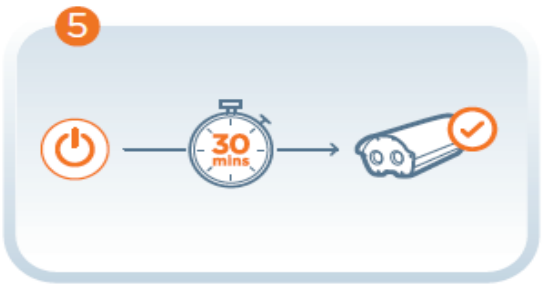
C3 Mass Scan Solution Successful Workflow

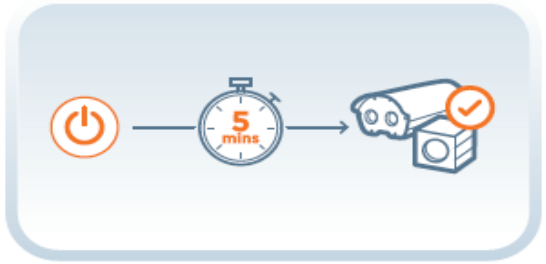
Recommended room temperature is 68° to 86° F (20~30 C)

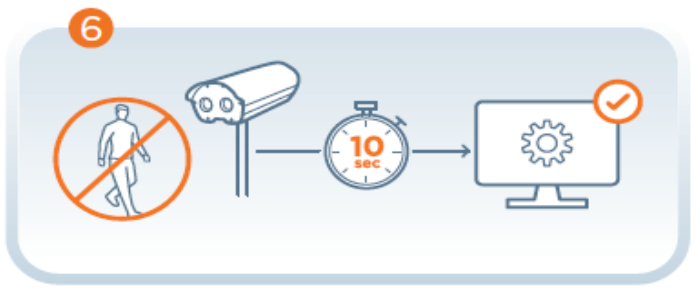












1. Install the camera facing away from the entrance or windows.
2. Make sure people are walking into the camera's FOV rather than straight towards the camera
3. Do not install the camera or Blackbody under an air conditioner duct.
4. Strong fluorescent lights may impact the temperature readings.
5. Allow the camera and Blackbody up to 5 minutes from power-up to calibrate properly. When installing a camera-only solution, allow up to 30 minutes to calibrate.
6. When powering up the E.S.T. monitoring software, keep the camera's FoV clear of people and moving objects for 10 seconds.
7. Always follow elevated temperature readings with additional screening such as a medical thermometer and wellness questionnaire.

Questions ?

Thank You !